

General Instructions and Information

1. This form is to be used to provide the Department with prior notification of radioactive waste shipments transported into or within the State of South Carolina. This notification is to be made 72 hours before the expected date of arrival in the State. All written notices should be mailed to:
Bureau of Radiological Health
Radioactive Waste Management Section
S.C. Dept. of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201
2. A separate form shall be submitted for each radioactive waste shipment.
3. Prior notification is required of all radioactive waste shipments as defined in paragraph 2 of Interim Regulations for the Transportation of Radioactive Waste into or within South Carolina except as provided in paragraph 4.1.2 of the Regulation
4. The "Manifest Summary" portion of this form will satisfy requirements of providing the Department with a shipping manifest, however, it does not satisfy the requirements of shipping documents which shall accompany the shipments as required by DOT Regulations and the disposal facility's license and criteria.
5. A copy of this completed form shall be provided to the carrier and all drivers of the radioactive waste shipment.
6. Upon delivery of the shipment to the consignee, acknowledgement of receipt shall be obtained, and a copy of this form and the shipper/carrier's certification form shall be returned to the Department.

Specific Instructions

Item Number

1. Self Explanatory
2. Self Explanatory
3. This item applies to all shipments of radioactive waste transported to and within the State of South Carolina.
4. Each shipment of radioactive waste shall be identified in some manner by the shipper. This number can be a radioactive shipment record number, bill of lading number, allocation number, etc. The identification number shall only be used once to identify the one shipment for which notification is being made.
5. Self Explanatory
6. Indicate in this item the disposal facility, company, organization, etc., to which this shipment has been consigned.
7. Self Explanatory
8. For through shipments, indicate in this item estimated date shipment will pass through the state.
9. Self Explanatory
10. & 11. Applies only to exclusive use, sole use, and full load shipments.
12. All routing information must be specific. You should check with carrier to insure routes you prescribe are appropriate. The carrier is responsible to inform the Department of any changes of routes in South Carolina after departure.
- thru 21. Self Explanatory

Certification To be signed only by an authorized representative or agent of the shipper and carrier.

Form RHA-PNC
(5/80)SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTRL
Radioactive Waste Shipment Prior Notification and Manifest Form

See Reverse Side for Instructions

1 Name and Address of Shipper Umetco Minerals Corporation 137 - 47th Street Niagara Falls, NY 14302		2 Person Responsible for Radioactive Waste Shipment (a) Name G.E. Walck (b) Title Construction Superintendent (c) Telephone No (716) 278-3361	
3 Radioactive Waste Transport Permit No 0211-31-84-X		4 Shipment Identification No 1184-118-A	
5 Location from which waste will be shipped Same as (1) above		6 Name and Address of Consignee Chem-Nuclear Systems, Inc. P.O. Box 726 Barnwell, South Carolina 29812	
7 Scheduled Date of Departure of Shipment November 6, 1984		8 Estimated Date of Arrival of Shipment November 8, 1984	
9 Carrier Tri-State Motor Transit	10 Type of Transport Vehicle Closed Van	11 Trailer No and Owner (if available)	
12 Routes shipment will follow in State of South Carolina (Be Specific) I-20, I-26, US-321, S.C. 3 and S.C. 64			

Manifest Summary

13 Type Container or Cask Wood Boxes	14 Container Spec CFR 49 173 392 (c)	15 Total No of Containers 10																									
16 Waste Description, Physical and Chemical Form Contaminated Soil, Metal Oxides, Bldg Rubble, Wood and Plant Hardware	17 Prominent Radionuclides Uranium (Nat.) .0028 Thorium (Nat.) .004																										
18 Total Curies (mCi) .068	19 Transport Group III	20 Total Cubic Feet 650																									
21 Waste Classification																											
<table border="0"> <tr> <td><input checked="" type="checkbox"/> Radioactive LSA</td> <td><input type="checkbox"/> Bulk LSA</td> <td>Normal Form</td> <td>Special Form</td> <td>Fissile</td> </tr> <tr> <td><input type="checkbox"/> Radioactive LSA greater than Type A quantities</td> <td><input type="checkbox"/> Limited quantities and radioactive devices</td> <td><input type="checkbox"/> Type A quantity</td> <td><input type="checkbox"/> Type B quantity</td> <td><input type="checkbox"/> Type A quantity</td> </tr> <tr> <td></td> <td></td> <td><input type="checkbox"/> Type B quantity</td> <td><input type="checkbox"/> Large quantity</td> <td><input type="checkbox"/> Class I</td> </tr> <tr> <td></td> <td></td> <td><input type="checkbox"/> Large quantity</td> <td><input type="checkbox"/> Large quantity</td> <td><input type="checkbox"/> Class II</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td><input type="checkbox"/> Class III</td> </tr> </table>			<input checked="" type="checkbox"/> Radioactive LSA	<input type="checkbox"/> Bulk LSA	Normal Form	Special Form	Fissile	<input type="checkbox"/> Radioactive LSA greater than Type A quantities	<input type="checkbox"/> Limited quantities and radioactive devices	<input type="checkbox"/> Type A quantity	<input type="checkbox"/> Type B quantity	<input type="checkbox"/> Type A quantity			<input type="checkbox"/> Type B quantity	<input type="checkbox"/> Large quantity	<input type="checkbox"/> Class I			<input type="checkbox"/> Large quantity	<input type="checkbox"/> Large quantity	<input type="checkbox"/> Class II					<input type="checkbox"/> Class III
<input checked="" type="checkbox"/> Radioactive LSA	<input type="checkbox"/> Bulk LSA	Normal Form	Special Form	Fissile																							
<input type="checkbox"/> Radioactive LSA greater than Type A quantities	<input type="checkbox"/> Limited quantities and radioactive devices	<input type="checkbox"/> Type A quantity	<input type="checkbox"/> Type B quantity	<input type="checkbox"/> Type A quantity																							
		<input type="checkbox"/> Type B quantity	<input type="checkbox"/> Large quantity	<input type="checkbox"/> Class I																							
		<input type="checkbox"/> Large quantity	<input type="checkbox"/> Large quantity	<input type="checkbox"/> Class II																							
				<input type="checkbox"/> Class III																							

CERTIFICATION

I hereby certify on behalf of the above-named shipper to the South Carolina Department of Health and Environmental Control that the information provided herein is complete and correct to the best of my knowledge, and that the shipper has complied with all the provisions as required by Act No 499 of 1980, the South Carolina Radioactive Waste Transportation and Disposal Act

Date October 22, 1984

G E. Walck - Construction Supt
Typed Name and Title of Agent of Shipper


Signature (G.E. Walck)

CONSIGNEE ACKNOWLEDGEMENT

This acknowledges to the South Carolina Department of Health and Environmental Control that the above-described radioactive waste shipment was received

Date of Delivery _____

Signature of Consignee or authorized Agent _____

Typed or Printed Name and Title _____

Original S Carolina
Copy. Chem-Nuclear

DHEC 802
(5/80)

(Copies of this form may be reproduced locally as needed)

UCCNHT0002680

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
Radioactive Waste Shipment Certification Form

General Instructions and Information: This is a two part form to be used by shippers and carriers of radioactive waste. The certifications contained herein satisfy the requirements of Section 13-7-150, of Act No. 499 of 1980, the South Carolina Radioactive Waste Transportation and Disposal Act. This certification along with a copy of the prior notification form shall accompany each shipment of radioactive waste into and within the State of South Carolina. The shipper is to complete his portion of the form and present it to the carrier as part of the shipping documents. Upon receipt, the carrier shall complete his portion of the form. Upon delivery of the shipment to the consignee, a copy of this certification form, and a copy of the Prior Notification and Manifest form with the consignee acknowledgement, shall be returned to the Department.

Part I: Shipper's Certificate of Compliance

1. Name of Shipper and Address: Umetco Minerals Corporation 137 - 47th Street Niagara Falls, NY 14302 Telephone No. (716) 278-3361	2. Shipment Identification No. 1184-118-A
	3. Transport Permit No. 0211-31-84-X

In compliance with Act No. 499 of 1980, the South Carolina Radioactive Waste Transportation and Disposal Act, I hereby certify on behalf of the above-named shipper to the South Carolina Department of Health and Environmental Control that the above-named shipper has complied with all provisions of Act No. 499 of 1980, and all applicable laws and administrative rules and regulations, both State and Federal, regarding the packaging, transportation, storage, disposal and delivery of such wastes. I further certify that this shipment of radioactive waste has been inspected within 48 hours of the time of departure and that no items of non-compliance with applicable laws, rules or regulations were found.

Date November 6, 1984
G E Walck, Construction Superintendent
Typed Name and Title of Agent of Shipper



Signature

Part II Carrier's Certification

1. Name of Carrier and Address: Tri-State Motor Transit Company P O. Box 113 Joplin, Missouri 64801 Telephone No. (800) 641-7591	2. Shipment Identification No. 1184-118-A
	3. Transport Trailer No.
4. Scheduled Date of Departure of Shipment: November 6, 1984	5. Estimated Date of Arrival of Shipment November 8, 1984

Certification is hereby made to the South Carolina Department of Health and Environmental Control that. (a) the shipper has provided the carrier with a copy of the shipment manifest, the certificate of compliance, and the routing instructions; (b) the shipment of radioactive waste has been properly placarded for transport according to applicable U.S. Department of Transportation Regulations; (c) all shipping papers originated or reproduced by the carrier have been properly executed; (d) the transport vehicle has been inspected according to applicable State and Federal regulations within the prescribed intervals and that all safety and operational components are in good working order and meet the requirements of regulations; (e) all drivers who will operate the vehicle within the State of South Carolina are qualified to transport hazardous materials as specified by applicable U.S. Department of Transportation regulations; (f) the Department shall be immediately notified of any variance, occurring after departure, from the shipper's notification of primary routes in South Carolina and estimated date of arrival; (g) all applicable laws and administrative rules and regulations, both State and Federal, regarding the transportation of radioactive wastes will be complied with.

Date November 6, 1984
Typed or Printed Name and Title


Signature

Tri-State Motor Transit Company

Carrier's No. 1662584

Name of Carrier

RECEIVED subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading

AT ~~Mametta, Ohio~~ Niagara Falls, NY 11/6, 19 84 From

UMETCO MINERALS CORPORATION
METALS DIVISION
UNION CARBIDE CORPORATION

For use via carrier truck under the exclusive/sole use shipments/movements

the property described below in apparent good order except as noted (contents and condition of contents of packages unknown) marked consigned and destined as indicated below which said carrier (the word carrier being understood through out this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination if on its route otherwise to deliver to another carrier on the route to said destination It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official Southern Western and Illinois Freight Classifications in effect on the date hereof if this is a rail or a rail water shipment or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading including those on the back thereof set forth in the classification or tariff which governs the transportation of this shipment and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns

Consigned to ~~UMETCO MINERALS CORPORATION~~ Chem Nuclear Systems Inc.
~~UMETCO MINERALS CORPORATION~~ Barnwell Management Facilities

SHIPPER'S ORDER NO

CUSTOMER'S ORDER NO

Destination ~~Uravay~~ Barnwell (Osborn Road) State ~~Colorado~~ S. Carolina County ~~Montrose~~ Barnwell

Route

Delivering Carrier Tri-State Motor Transit Car or Vehicle Initials 8859 No 445109 Seal 262528

No Packages	Kind of Package, Description of Articles Special marks, and Exceptions	*Weight (Sub to correction)	*Class or Rate	Check Column
9	Radioactive Materials 1SA nos (585 cu. ft.)			
	Radioactive Material UN-2912			
	Natural			
	Uranium/Thorium Residues (From) Chemical Processing			
	0.016 Max Xcures per Package Less than one (1) pound source			
	material - solid, metal oxide, contaminated soil			
	building rubble, wood and plant equipment.			
This is to certify that the above named materials are properly classified described packaged marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation				
Signed <i>G. E. Walck</i>				
Vehicle assigned for sole use of consignor Do not load other freight on the vehicle do not transfer in route and do not break the seal on truck				
Carrier hereby acknowledges that prior to or at the time this shipment was offered for transportation the shipper provided or affixed according to applicable regulations the required placards or orange panels (including prescribed identification numbers) for each hazardous material named hereon				
Signed <i>Robert E. Phillips</i>				

Subject to Section 7 of Conditions of applicable bill of lading if this shipment is to be delivered to the consignee without recourse on the consignor the consignor shall sign the following statement

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges

(Signature of consignor)

If charges are to be prepaid write or stamp here To be prepaid

Third Party

PREPAID (See below)*

Received \$

to apply in prepayment of the charges on the property described hereon

Agent or Cashier

Per (The signature here acknowledges only the amount prepaid)

Charges advanced

\$

This shipment is correctly described

Correct weight is lbs Subject to verification by the

*L.G. Evans
Umetco Minerals Corp.

P.O. Box 97
Niagara Falls, NY
14301

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding per

METALS DIVISION
UNION CARBIDE CORPORATION

UMETCO MINERALS CORPORATION

Shipper

Agent

Per *G. E. Walck*
Permanent postoffice address of shipper UC 326-34
G. E. Walck

Per

Operated by CHEM-NUCLEAR SYSTEMS, INC

USE THIS NUMBER ON VOLUME ALLOCATION NO
ALL CONTINUATION PAGES 1184-118-A

CONTINUATION SHEET

PAGE TOTALS

CUSTOMER'S COPY

UCCNHT0002683

GENERATOR NAME Umetco Minerals Corporation

PAGE 2 OF 2

PAGE 2 OF 2

PAGE TOTALS

DISPOSAL SITE COPY

UCCNHT0002684

(1) GENERATOR NAME Umetco Minerals Corporation

ADDRESS 137 - 47th Street

CITY Niagara Falls STATE New York

CONTACT G.E. Walck PHONE (716)278-3361

(2) consigned to
CHEM NUCLEAR SYSTEMS, INC
P O BOX 726, OSBORN ROAD
BARNWELL, S C 29812

BARNWELL WASTE MANAGEMENT FACILITY

Operated by CHEM-NUCLEAR SYSTEMS, INC
P O Box 726, Barnwell, South Carolina 29812
(803) 259-1781

RADIOACTIVE SHIPMENT MANIFEST FORM.

(3) USE THIS NUMBER ON
ALL CONTINUATION PAGES

VOLUME ALLOCATION NO
1184-118-A

PAGE 1
OF 2

(4) Tri-
CARRIER State ADDRESS Joplin, Missouri 64801
TELEPHONE 417-624-3131 SHIPPING DATE 11/6/84
SHIPMENT TYPE Van SHIPMENT SURFACE EXPOSURE, 0.46 mR/hr
SHIPMENT NO 615-3014 LINER SERIAL NO _____
DRIVER SIGNATURE [Signature] DATE 11-6-84

(5) TOTAL FOR EACH CLASS		PROPER SHIPPING NAME & HAZARD CLASS (PER 49 CFR 172.101)	ID NUMBER
NO OF PACKAGES	WEIGHT (Pounds)		
		Radioactive Material, empty packages	UN2908
		Radioactive Material, fissile, n o s —Radioactive Material	UN2918
9	43006	Radioactive Material, low specific activity, n o s —Radioactive Material	UN2912
		Radioactive Material, n o s —Radioactive Material	UN2982
		Radioactive Material, limited quantity, n o s —Radioactive Material	UN2910
		Radioactive Material, special form, n o s —Radioactive Material	UN2974
		Radioactive Material, instruments and articles—Radioactive Material	UN2911
		Other (Specify)	

(6) SHIPMENT TOTALS							
VOLUME (Cubic Feet)	TOTAL NO OF PACKAGES	ACTIVITY (10CFR 20.311)					SOURCE (Pounds)
		<input type="checkbox"/> Curies <input checked="" type="checkbox"/> Millicuries					
		ALL ISOTOPES	TRITIUM	C 14	Te 99	I 129	
585	9	0.06	NP	NP	NP	NP	0.9

(7) TOTAL SNM	
ISOTOPE	GRAMS
U 233	N/A
U 235	
TOTAL	↓

(8) TOTAL PALLET VOLUME (CU FT) N/A

(9) WASTE DESCRIPTION Contaminated Soil
Misc. Debris

(10) PHYSICAL FORM/
SOLIDIFICATION AGENT Solid

(11) CHEMICAL FORM AND
NAME AND % OF CHELATING AGENT(S) Metal Oxides

(12) WASTE FORM CLASS
☒ A ☐ B ☐ C

(13) ☒ Yes () No THIS VEHICLE IS CONIGNED EXCLUSIVE USE LOADING AND UNLOADING MUST BE ACCOMPLISHED BY CONSIGNOR OR CONSIGNEE OR HIS DESIGNATED AGENT

(14) IMPORTANT "This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

Signature [Signature]

Company Umetco Minerals Corporation Date 11/6/84

(15) "Certification is hereby made to the South Carolina Department of Health and Environmental Control that this shipment of low level radioactive waste has been inspected in accordance with the requirements of South Carolina Radioactive Material License No. 097 as amended, and the Nuclear Regulatory Commission's License No. 12 13536 01 as amended, and the effective Barnwell Site Disposal Criteria within 48 hours prior to shipment, and further certification is made that the inspection revealed no items of non compliance with all applicable laws, rules and regulations"

Date 11/6/84 By [Signature]

Title and Organization Construction Superintendent - Umetco Minerals Corp

Telephone No (716) 278-3361

- ☒ This material meets all license requirements
☒ This material was disposed of in accordance with license
☐ Discrepancy

NOV 15 1984

Date 11-9-84
Authorized Signature [Signature] Title Asst. Dir.

UCCNHT0002685

Union Carbide Corporation

LINDE DIVISION • GAS PRODUCTS COMPLEX
4501 ROYAL AVENUE NIAGARA FALLS, N.Y. 14303

WEIGHT TICKET

TR- STATE MOTOR -
TR # 8855 TL# 4451095 WO# 662584
Robert Kelly 11-6-84

S - 10,520

D - 28,780

T - 32,360

03108F 11/06/84

0000 8859

41 8 57

GROSS 10520

03108F 11/06/84

0000 8859

41 8 57

GROSS 28780

03108F 11/06/84

0000 8859

41 8 57

GROSS 72180

03109F 11/06/84

0000 8859

41 8 57

GROSS 32360

72180

28800

43,380 #

Union Carbide Corporation

LINDE DIVISION • GAS PRODUCTS COMPLEX

4501 ROYAL AVENUE NIAGARA FALLS, N.Y. 14303

WEIGHT TICKET

TRI-STATE MOTOR
TR# 8854 TR# 445109^I
Robert J. Gallagher

WGT# 662584

11-6-84

12:03P 11/06/84
0000 0000
22 2 22
GROSS 28800#

72180
- 28800

43,380 #

Sanco Minerals Corp

CONTINUATION SHEET

PAGE 2 OF 2

1194-113-A

(16) ITEM NO	(17) RADIO NUCLIDE EACH CONTAINER	(18) PERCENT OF ACTIVITY EACH NUCLIDE	(19) ACTIVITY EACH CONTAINER (mCi)	(20) PHYSICAL FORM	(21) CHEMICAL FORM AND NAME & OF CHILLING AGENT	(22) WASTE DESCRIPTION	(23) WASTE FORM CLASS	(24) STABILITY CLASS IS ID	(25) SPECIAL NUCLEAR MATERIAL (grams)	(26) SOURCE MATERIAL (pounds)	(27) DISPOSABLE CONTAINER WEIGHT (pounds)	(28) DISPOSABLE CONTAINER VOLUME (Cu Ft.)	(29) CONTAINER TYPE	(30) ✓ RADIATION LEVELS CONTAINER (TTL) SURF ACI 1 METER SURF ACI mR/hr	(31) CONTAMINATION CONTAINER SURFACE (G/M²/100, m²) Alpha Beta Gamma	(32) DOT SUB TYPE (A1 A2 LSA etc.)	(33) FISSILE CLASS	(34) LABELS/ MARKINGS USED
201	01	✓								0.1	4672	65		.034 .012				Radioactive—
202	02	✓								0.1	4868	65		.036 .012				Radioactive—
208	03	✓								0.1	5022	65		.020 .010				Radioactive—
211	04	✓								0.1	4584	65		.032 .014				Radioactive—
214	05	✓								0.1	4788	65		.032 .014				Radioactive—
220	06	✓								0.1	4818	65		.060 .014				Radioactive—
223	07	✓								0.1	4540	65		.028 .012				Radioactive—
224	08	✓								0.1	4772	65		.044 .014				Radioactive—
226	09	✓								0.1	4942	65		.040 .016				Radioactive—
																		Radioactive—
																		Radioactive—
																		Radioactive—
																		Radioactive—
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																		Radioactive—
PAGE TOTALS										0.9	43006	585						Radioactive—

DISPOSAL SITE COPY

UCCNHT0002688

GENERATOR NAME Umetco Minerals Corporation
ADDRESS 137 - 47th Street
CITY Niagara Falls STATE New York
CONTACT G E Walck PHONE (716) 278-3361

consigned to
CHEM NUCLEAR SYSTEMS, INC
P O BOX 726 OSBORN ROAD
BARNWELL, SC 29812

BARNWELL WASTE MANAGEMENT FACILITY

Operated by CHEM NUCLEAR SYSTEMS, INC
P O Box 726, Barnwell, South Carolina 29812
(803) 259 1781

RADIOACTIVE SHIPMENT MANIFEST FORM

USE THIS NUMBER ON
ALL CONTINUATION PAGES

VOLUME ALLOCATION NO
1184-118-A

PAGE 1
OF 2

Tri-
CARRIER State ADDRESS Joplin, Missouri 64801
TELEPHONE 417-624-3131 SHIPPING DATE 11/6/84
SHIPMENT TYPE Van SHIPMENT SURFACE EXPOSURE .046 mR/hr
SHIPMENT NO 615-3014 LINER SERIAL NO _____
DRIVER SIGNATURE [Signature] DATE 11-6-84

(a) TOTAL FOR EACH CLASS		PROPER SHIPPING NAME & HAZARD CLASS (PER 49 CFR 172.101)	ID NUMBER
NO. OF PACKAGES	WHICH CLASS		
		Radioactive Material, empty packages	UN2908
		Radioactive Material, fissile, n.o.s. - Radioactive Material	UN2918
9	43006	Radioactive Material, low specific activity, n.o.s. - Radioactive Material	UN2912
		Radioactive Material, n.o.s. - Radioactive Material	UN2982
		Radioactive Material, limited quantity, n.o.s. - Radioactive Material	UN2910
		Radioactive Material, special form, n.o.s. - Radioactive Material	UN2974
		Radioactive Material, instruments and articles - Radioactive Material	UN2911
		Other (Specify)	

SHIPMENT TOTALS							
VOLUME (Cubic Feet)	TOTAL NO. OF PACKAGES	ACTIVITY (RADIATION DOSE RATE) (mCi/gm)				SOURCE (Pouches)	
		ALL ISOTOPIES	U-235	U-238	Th-232		
585	9	0 06	NP	NP	NP	NP	0 9

(c) TOTAL SNM	
ISOTOPE	GRAMS
U 233	N/A
U 235	
TOTAL	↓

TOTAL PALLET VOLUME (CU. FT.) N/A

WASTE DESCRIPTION Contaminated Soil PHYSICAL FORM/SOLIDIFICATION AGENT Solid CHEMICAL FORM AND NAME AND % OF CHELATING AGENT(S) Metal Oxides WASTE FORM CLASS ☒ A ☐ B ☐ C

(X) Yes () No THIS VEHICLE IS CONSIGNED EXCLUSIVE USE LOADING AND UNLOADING MUST BE ACCOMPLISHED BY CONSIGNOR OR CONSIGNEE OR HIS DESIGNATED AGENT

IMPORTANT This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

Signature [Signature]
Company Umetco Minerals Corporation Date 11/6/84

Certification is hereby made to the South Carolina Department of Health and Environmental Control that this shipment of low level radioactive waste has been inspected in accordance with the requirements of South Carolina Radioactive Material License No. 097 as amended and the Nuclear Regulatory Commission's License No. 12 13536 01 as amended and the effective Barnwell Site Disposal Criteria within 48 hours prior to shipment and further certification is made that the inspection revealed no items of non compliance with all applicable laws, rules and regulations

Date 11/6/84 By [Signature]
Title and Organization Construction Superintendent - Umetco Minerals Corp
Telephone No. (716) 278-3361

CNSI USE ONLY

- ☐ This material meets all license requirements
☐ This material was disposed of in accordance with license
☐ Discrepancy _____

DISPOSAL SITE COPY

Form No CNS 201
(9-83)

SEE INSTRUCTIONS ON REVERSE SIDE
FOR FILLING OUT THIS FORM

Arrival Date _____ Arrival Survey No _____
Date/Time Buried _____ H. P. Initial _____
Trench No _____ Location Code _____
Waste Class Code _____
Personnel Exposure _____

Date _____
Authorized Signature _____ Title _____

UCCCNHT00002689

(1) GENERATOR NAME Umetco Minerals Corporation

ADDRESS 137 - 47th Street

CITY Niagara Falls STATE New York

CONTACT G.E. Walck PHONE (716) 278-3361

(2) **consigned to**
CHEM NUCLEAR SYSTEMS, INC
P O BOX 726, OSBORN ROAD
BARNWELL, S C 29812

BARNWELL WASTE MANAGEMENT FACILITY

Operated by CHEM-NUCLEAR SYSTEMS, INC
P O Box 726, Barnwell, South Carolina 29812
(803) 259-1781

RADIOACTIVE SHIPMENT MANIFEST FORM

(3) USE THIS NUMBER ON
ALL CONTINUATION PAGES

VOLUME ALLOCATION NO
1184-118-A

PAGE 1
OF 2

(4) **Tri-**
CARRIER State ADDRESS Joplin, Missouri 64801

TELEPHONE 417-624-3131 SHIPPING DATE 11/6/84

SHIPMENT TYPE Van SHIPMENT SURFACE EXPOSURE 0.046 mR/hr

SHIPMENT NO 615-3014 LINER SERIAL NO

DRIVER SIGNATURE Robert Gallagher DATE 11-6-84

(5) TOTAL FOR EACH CLASS		PROPER SHIPPING NAME & HAZARD CLASS (PER 49 CFR 172.101)	ID NUMBER
NO OF PACKAGES	WEIGHT (Pounds)		
		Radioactive Material, empty packages	UN2908
		Radioactive Material, fissile, n o s —Radioactive Material	UN2918
<u>9</u>	<u>43006</u>	Radioactive Material, low specific activity, n o s —Radioactive Material	UN2912
		Radioactive Material, n o s —Radioactive Material	UN2982
		Radioactive Material, limited quantity, n o s —Radioactive Material	UN2910
		Radioactive Material, special form, n o s —Radioactive Material	UN2974
		Radioactive Material, instruments and articles—Radioactive Material	UN2911
		Other (Specify)	

(6) SHIPMENT TOTALS							
VOLUME (Cubic Feet)	TOTAL NO OF PACKAGES	ACTIVITY (10 CFR 20.311)					SOURCE (Pounds)
		<input type="checkbox"/> Curies <input type="checkbox"/> Millicuries					
		ALL ISOTOPES	TRITIUM	C 14	IC 99	I 129	
585	9	0.06	NP	NP	NP	NP	0.9

(7) TOTAL SNM	
ISOTOPE	GRAMS
<u>U-233</u>	<u>N/A</u>
<u>U 235</u>	<u>1</u>
TOTAL	<u>1</u>

(9) WASTE DESCRIPTION Contaminated Soil
Misc. Debris

(10) PHYSICAL FORM/
SOLIDIFICATION AGENT Solid

(11) CHEMICAL FORM AND
NAME AND % OF CHELATING AGENT(S) Metal Oxides

(12) WASTE FORM CLASS
☒ A ☐ B ☐ C

(13) ☒ Yes () No THIS VEHICLE IS CONSIGNEE EXCLUSIVE USE LOADING AND UNLOADING MUST BE ACCOMPLISHED BY CONSIGNOR OR CONSIGNEE OR HIS DESIGNATED AGENT

(14) IMPORTANT This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

Signature

Company Umetco Minerals Corporation

Date 11/6/84

(15) Certification is hereby made to the South Carolina Department of Health and Environmental Control that this shipment of low level radioactive waste has been inspected in accordance with the requirements of South Carolina Radioactive Material License No 097 as amended, and the Nuclear Regulatory Commission's License No 12 13536-01 as amended, and the effective Barnwell Site Disposal Criteria within 48 hours prior to shipment, and further certification is made that the inspection revealed no items of non compliance with all applicable laws, rules and regulations.

Date 11/6/84

By

Title and Organization Construction Superintendent - Umetco Minerals Corp

Telephone No (716) 278-3361

CNSI USE ONLY

☐ This material meets all license requirements

☐ This material was disposed of in accordance with license

☐ Discrepancy

CUSTOMER'S COPY

Form No CNS 201

(9-83)

SEE INSTRUCTIONS ON REVERSE SIDE
FOR FILLING OUT THIS FORM

Arrival Date

Arrival Survey No

Date/Time Buried

H P Initial

Trench No

Location Code

Waste Class Code

Personnel Exposure

Date

Authorized Signature

Title

UCCNHT0002690

CHEM-NUCLEAR SYSTEMS, INC.

INSTRUCTIONS FOR COMPLETING RADIOACTIVE SHIPMENT MANIFEST FORM

NOTE SHIPMENT MAY BE REFUSED IF CONTENTS, SUPPORTING DOCUMENTATION AND PACKAGING REQUIREMENTS ARE NOT IN COMPLIANCE WITH CHEM-NUCLEAR SYSTEMS, INC.'S STATE AND FEDERAL LICENSES, THE BARNWELL SITE CRITERIA AND APPLICABLE DOT AND NRC SHIPPING REGULATIONS

GENERATOR OR SHIPPER MUST PROVIDE (PRINTED OR TYPED) INFORMATION IN ALL NUMBERED AREAS ON THE RSM FORM. USE OF N/A FOR "NOT APPLICABLE" IS AUTHORIZED.

- | ITEM | DESCRIPTION OF ITEMS |
|------|--|
| 1 | Indicate generator name (consignor), address, contact person and phone number of person responsible for making shipment |
| 2 | Consignee If shipment is being made to some other facility and this form is being used, blot out this section and write in who the consignee is |
| 3 | Each shipment is assigned a volume allocation number by the Barnwell office. Write the number in this space and use this same number on all continuation pages used for each shipment. Number all pages in chronological order |
| 4 | List the carrier, address, telephone number, shipping date, shipment type (van, cask, etc.), shipment surface exposure (highest radiation exposure on the exterior of the van, cask, etc.), shipment number, liner serial number, driver signature and date |
| 5 | Indicate the total number of containers and the total weight, in pounds, of each hazard class |
| 6 | Record the cumulative total of all hazard classes in these blocks. Check appropriate box for the units of activity measurements. If the stated radioisotopes listed in the four (4) columns are not present, record in the blocks as "not present" (N P). If the radioisotopes do exist, but are in quantities less than the lower limits of detection (LLD), the quantities of the nuclides must be recorded as being less than the minimum detectable. The minimum detectable amount must be included in parenthesis. Isotopes U-238, Th-232, or any other material which is source material must be recorded in source pounds |
| 7 | List weight, in grams, of special nuclear material |
| 8 | Record volume, in ft ³ , of all disposable pallets |
| 9 | SEE ITEM NO 22 |
| 10 | SEE ITEM NO 20 |
| 11 | SEE ITEM NO 21 |
| 12 | SEE ITEM NO 23 |
| 13 | Indicate if shipment is transported as exclusive use or not applicable. If "yes" is checked, instructions for maintenance of exclusive use vehicles must be provided by the shipper to the carrier |
| 14 | A company representative of the generator must sign the DOT certification. All signatures must be legible |
| 15 | A company representative of the generator must sign the SC DHEC certification. Title, organization and phone number must be indicated. The date must be within 48 hours of the shipping date as specified in block 4. Under no circumstances should the shipping date be prior to the certification date of block 15. All signatures must be legible |
| 16 | List each container separately. Item number(s) on the disposal container(s) must correspond with item number(s) listed on the RSM form |
| 17 | List the prominent radionuclides in each container. Use of MFP or MCP are not authorized. Use as many lines as necessary to describe the contents of the container. NOTE: If more than one container in the shipment contains the same activity distribution of each radionuclide, a listing of radionuclides is required for the first container only. Subsequent containers in this series will require a lone line entry with appropriate information on each. Use of the words, "See attached", is not an appropriate entry |
| 18 | Record the percent abundance of each radionuclide or the activity of each radionuclide in mCi, in each container (See #17 above) |
| 19 | Record the cumulative total of all isotopes in each container, in mCi |
| 20 | Record the physical form of the waste material. "Liquid" is not authorized |
| 21 | Record the chemical form of the waste material. NOTE If material contains chelating agents in quantities greater than 0.1%, the names and weight percentage must be listed |
| 22 | Describe briefly what the waste is. If the material is solidified, indicate what solidification media is used. EX: Compacted trash, non compacted trash, dewatered resin, solidified liquid in cement, solidified resin in cement, filters in cement, compacted lab trash or non compacted lab trash, building rubble, metal components, etc |
| 23 | List the classification of the waste package, either A, B, or C per 10 CFR 61.55 |
| 24 | Indicate the waste as being Stable (S) or Unstable (U). 10 CFR 61.56 |
| 25 | Weight, in grams, of the isotopes U-233 or U-235 or any other material which is special nuclear material |
| 26 | Weight, in pounds, of the isotopes U-238, Th-232, or any other material which is source material |
| 27 | Weight, in pounds, of each disposable container including its contents |
| 28 | Record the volume, in ft ³ , of the disposable container. Boxes with attached skids must include the skids in this volume. Drum pallets or spacers inside casks are not classified as radioactive waste |
| 29 | List each type of container used, (wood box, steel box) drum, 17H, 17E, etc |
| 30 | Record the highest measured radiation level for each disposable container surface. Package surface may be the same as disposable container if a cask is not used. Transport Index (TI) equals mR/hr at 1 meter from accessible container(s) |
| 31 | Record the results of contamination surveys performed on the disposable containers. Do not use "BKG" for background levels unless the background level is indicated in this column |
| 32 | Indicate DOT sub types as A1, A2, LSA, etc. 49 CFR 173.403 |
| 33 | If fissile radioactive material is being shipped, record the fissile class of the material as appropriate |
| 34 | Write in what kind of DOT labels or markings are used on each container. Such as Radioactive W-1, Y-11, Y-111 or Radioactive-LSA |

3.0 AT DESTINATION (Union Carbide Corporation, Uravan, Colorado)

- 3.1 Give notification of arrival and receive guidance to unloading site.
- 3.2 Examine security seals and inspect outside of truck for damage or pilfering.
- 3.3 The shipment must be unloaded by Consignor from the transport vehicle in which originally loaded.
- 3.4 UCC or its representative will certify vehicles clean and available for Unrestricted Use and decontaminate if necessary.

4.0 PENALTY

- 4.1 Any deviation from these instructions or violations of State and Federal laws could result in carrier penalty.



Driver's Signature

Date

GENERATOR NAME Umetco Minerals Corporation

PAGE 2 OF 2

PAGE 2 OF 2

PAGE TOTALS

DISPOSAL SITE COPY

UCCNHT0002693

(1) GENERATOR NAME Umetco Minerals Corporation
ADDRESS 137 - 47th Street
CITY Niagara Falls STATE New York
CONTACT G E Walck PHONE (716) 278-3361

consigned to
CHEM NUCLEAR SYSTEMS, INC
P O BOX 726 OSBORN ROAD
BARNWELL S.C. 29812

BARNWELL WASTE MANAGEMENT FACILITY

Operated by CHEM NUCLEAR SYSTEMS, INC
P O Box 726, Barnwell, South Carolina 29812
(803) 259 1781

RADIOACTIVE SHIPMENT MANIFEST FORM

(3) USE THIS NUMBER ON
ALL CONTINUATION PAGES

VOLUME ALLOCATION NO
1184-118-A

PAGE 1
OF 2

(4) Tri-
CARRIER State ADDRESS Joplin, Missouri 64801
TELEPHONE 417-624-3131 SHIPPING DATE 11/6/84
SHIPMENT TYPE Van SHIPMENT SURFACE EXPOSURE _____ mR/hr
SHIPMENT NO 615-3014 LINER SERIAL NO _____
DRIVER SIGNATURE _____ DATE _____

(2) TOTAL FOR EACH CLASS		PROPER SHIPPING NAME & HAZARD CLASS (PER 49 CFR 172.101)	ID NUMBER
NO. OF PACKAGES	WEIGHT (Pounds)		
		Radioactive Material, empty packages	UN2908
		Radioactive Material, fissile, n.o.s. - Radioactive Material	UN2918
<u>9</u>	<u>43006</u>	Radioactive Material, low specific activity, n.o.s. - Radioactive Material	UN2912
		Radioactive Material, n.o.s. - Radioactive Material	UN2982
		Radioactive Material, limited quantity, n.o.s. - Radioactive Material	UN2910
		Radioactive Material, special form, n.o.s. - Radioactive Material	UN2974
		Radioactive Material, instruments and articles - Radioactive Material	UN2911
		Other (Specify) _____	

(5) SHIPMENT TOTALS							
VOLUME (CU. FT.)	TOTAL NO. OF PACKAGES	ACTIVITY (CODES TO 311) L: Class <input checked="" type="checkbox"/> M: <input type="checkbox"/> S: <input type="checkbox"/>					SURFACE EXPOSURE (mR/hr)
		ALL ISOTOPES	TRANSFORM	C 14	Te 99	Te 99	
<u>585</u>	<u>9</u>	<u>0 06</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>0 9</u>

(7) TOTAL SNM	
ISOTOPE	GRAMS
<u>U 233</u>	<u>N/A</u>
<u>U 235</u>	<u>_____</u>
TOTAL	<u>_____</u>

(6) TOTAL PALLET VOLUME (CU. FT.) N/A

(7) WASTE DESCRIPTION Contaminated Soil
Misc Debris
(8) PHYSICAL FORM / SOLIDIFICATION AGENT Solid
(9) (X) Yes () No THIS VEHICLE IS CONSIGNED EXCLUSIVE USE LOADING AND UNLOADING MUST BE ACCOMPLISHED BY CONSIGNOR OR CONSIGNEE OR HIS DESIGNATED AGENT

(10) IMPORTANT This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

Signature _____
Company Umetco Minerals Corporation Date 11/6/84

(11) CHEMICAL FORM AND NAME AND % OF CHELATING AGENT(S) Metal Oxides
(12) WASTE FORM CLASS ☒ A ☐ B ☐ C

(13) Certification is hereby made to the South Carolina Department of Health and Environmental Control that this shipment of low level radioactive waste has been inspected in accordance with the requirements of South Carolina Radioactive Material License No. 097 as amended and the Nuclear Regulatory Commission's License No. 12 13536 01 as amended and the effective Barnwell Site Disposal Criteria within 48 hours prior to shipment and further certification is made that the inspection revealed no items of non compliance with all applicable laws, rules and regulations

Date 11/6/84 By _____
Title and Organization Construction Superintendent - Umetco Minerals Corp
Telephone No (716) 278-3361

CNSI USE ONLY

- ☐ This material meets all license requirements
☐ This material was disposed of in accordance with license
☐ Discrepancy _____

DISPOSAL SITE COPY

Form No CNS 201
(9-83)

SEE INSTRUCTIONS ON REVERSE SIDE
FOR FILLING OUT THIS FORM

Arrival Date _____ Arrival Survey No _____
Date/Time Buried _____ H. P. Initial _____
Trench No _____ Location Code _____
Waste Class Code _____
Personnel Exposure _____

Date _____
Authorized Signature _____ Title _____

UCCCNHT00002694